### Cheap Transportation.

At the late meeting of the California State Grange of Patrons of Husbandry, in San Jose, the Committee on Transportation and Legislation reported as follows: Your Committee, to whom was referred that portion of the "Declaration of Purposes of the State Grange" of California having reference to the subject of trans-portation and legislation, beg leave to report, first,

#### On Transportation.

On Transportation.

It has been said that "cheap transportation of persons and property is a national necessity." Nowhere can the force of this axiom be more fully realized than here in our favored State. With a territory great in extent, affording within its limits the productions of both torrid and temperate zones, with a climate varied as its productions, and with a population gathered from all parts of the globe, we can readily understand how facilities for bringing producer and consumer together will contribute to our comfort and convenience. Our wheat, our wool, our wines, our fruit, our minerals, all sources of wealth, health and laxury, must be transported either in a raw or manufactured state; to fetch and carry them, so that the greatest good will ensue to the greatest number, is a study well worthy of the political economist, and its solution will remove an oppressive burden which now hangs like a milistone around the neck of the producer of our State. Our present avenues for transportation of regist are either insufficient or do not perform their proper work. Our inland water courses are blockaded for months during the dry season by sand bars and shoals. The exerbitant rates in many cases charged for transportation on railreads make the cost of moving our crops to market almost prohibitory, and in years of pienty the producer can scarcely realize the cost of production. These things, with the unjust discrimination sometimes made, cause fluctuations, which at times unduly excite, at other times depress and destroy, the agricultural and manufacturing interests of our State, and have a tendency even to depopulate it.

While we recognize in the railway an effectual instrument to aid in developing the agricultural resources of the State, and believe that the public interests of the country and its producers would be subserved by fostering the further development of the railway system, provided such a judicious management can be obtained as will secure equitable and just treatment in the way of fares and

and traveler to pay excessive fare and freight on such road.

2d. In permitting the consolidation of what should be rival lines in our State, inasmuch that such action is contrary to public policy in building strong monopolies which dery competition, facilitate the charging of exceptitant rates and discriminates unjustly in favor of or against localities, and enables such monopolies to attain their objects by introducing into our legislative and judicial hails, and by the use of our safeguards for their own selfish ends, carry out a policy which builds up the carrier at the expense of the producer or consumer.

Expurer should encourage the complex and exactly to

their own selfish ends, carry out a policy which builds up the carrier at the expense of the producer or consumer.

Farmers should encourage the opening and establishing of new routes, under proper restrictions, and retain controlling interest in them. Canats from interior points to communicate with our navigable streams should be constructed; narrow-gauge railways, so much cheaper in constructed; narrow-gauge railways, so much cheaper in constructed and poperation than the present broad-gauge, are well adapted to cheap transportation and would help meet the exigencies required. All farmers, as well as Patrons of Husbandry, should unite in an effort to secure a reduction of freight and fare and charges on initiand as well as occan routes, and withhold their voice, their votes and subscription from all transporting corporations which will not agree that such uniform, equitable rates shall be fixed by the State authorities as will afford a fair reminieration to them and at the same time will not be an oppressive burden to the producer and consumer.

Another and true way to correct and alleviate the present trouble and assist the producer of this State would be to create a home consumption for our products by encouraging and drawing to us manufactories. These, by affording us consumers at home, would do away with all need of transportation of much that is now surplus. If a moiety of the subsidies by farmers to railroads in this State, had been invested in manufactories, our population would have been so increased, that the home market for produce would be double what it is now. If the demand for transportation is of such a varied nature and of such vast importance, that your committee have approached it with reductance. Especially as the whole subject is now in the hands of the special committee of the United States Senate, who, with a great deal of care and considerable expense, are now gathering facts and statistics to make a report which will, no doubt, be made public in time to enable us to derive as much or m

## Legislation.

Legislation.

The agriculturists of this as well as other States, may justly complain of the unequal burdens imposed upon them for the support of State and Federal Governments, while they receive no more, and in many cases not near so much, care and protection from the Government as other industries; yet the statistics show the producers (we include in this class — the farmer, the stockman, the fruit-grower and the mechanic), either directly or indirectly, pay nearly all the taxes that are required for the machinery of the Government. Our lands are taxed, our stock is taxed, our crops are taxed, our improvements are taxed, and in addition to this we pay most of the tax and tariff which is required by the Government from manufacturers. We pay in addition to the cost of transportation on all articles which are brought from abroad, whether of luxury or comfort, the revenue which the Government receives from their importation.

they were created. The commission would afford protection and redress to every individual having dealings with the companies, without obliging them to apply to the courts at great expense or delay.

In order to secure more uniform and equal taxation, we recommend that the duties enjoined upon our assessors be more definite and specific, and penalties be inflicted upon them when it can be shown they have made unfair or unjust discrimination in fixing valuation or assessing land and property in the same locality, or when they consent to receive any special favors from large property-holders or taxapayers, even if it is but a railroad pass.

We recommend that our representatives both at Sacramento and at Washington, be petitioned to interfere in our behalf, and redress our grievances by carrying out the measures proposed, or if the plans suggested are not practicable, or will not have the desired effect, let them devise some other way by which taxation shall be reduced and under uniform and equal; freight and fares be regulated so as to prevent injust discrimination and oppressive rates; additional facilities for transportation be encouraged and built up, and the agricultural and mechanical industries of our country receive more festering care from the hands of our Government.

The Manufacture of Paner.

#### The Manufacture of Paper.

According to a recent estimate, which may be considered as approximate rather than ex-

According to a recent estimate, which may be considered as approximate rather than exact, the total annual production of paper in the civilized world is one million tons; and of this nearly one-third, or 317,387 tons, is manufactured in the United States. There were in this country, by late statistics, 812 paper-mills, making an average of about \$67,000,000 worth of paper yearly.

The number of uses for building, clothing, ornamental and other purposes to which paper is now applied after its manufacture is only paralleled by the variety of substances from which it is found that paper can be made. A mill has lately been started in Illinois, in which the "rag-weed," which the farmers plow in, in large quantities every year, is to be turned to good account by making it into paper and rope. The use of oat-busks for a similar purpose was begun some time ago, and is the subject of one or more patented processes. In one of these the husks are immersed in water and the mustard and other seeds floated off, the water being well stirred to facilitate their separation. The husks are then allowed to settle, the surface scum and floating seeds skimmed or drawn off, and the water drained out by a waste-pipe at the bottom of the tank, the husks being kept back by a strainer or perforated false bottom. By steeping in the water from five to ten hours, the husks are softened and the silica loosened from the fiber, thus facilitating the subsequent boiling process. The remaining stages of the work are substantially the same as in the manufacture of paper from straw.

In making paper from rags, as a practical

In making paper from rags, as a practical writer on this subject forcibly argues, the common impression that some one particular stage of the work is the critical and turning point, and that if due care and skill are exercised at that one step all the rest will comeright of themselves, is a dangerous fallacy; the truth being that continual and vigilant watchfulness, in all parts of the process of manufacture, is necessary to the production of a good article of paper. The same writer maintains that the rag-room is one of the most important departments of the mill, though often the least cared for; and that thorough work at this initial stage of the business is indispensable to a satisfactory final result—which is certainly a reacared for; and that thorough work at this initial stage of the business is indispensable to a satisfactory final result—which is certainly a reasonable view. In regard to getting rid of the mixture of india-rubber which is now in such universal use that it is found in all kinds of rags, and is extremely troublesome, being insoluble by any of the chemicals ordinarily used in paper mills, he mentions the plan adopted by a British proprietor, who paid the sorters a certain price per pound for all the rubber they found in the rags dressed by them. The rubber thus collected was weighed at the end of each week and burned up, so that it should not be returned and paid for a second time. Whatever may be the method of removing the rubber, it must be done in the rag-room, as it will not do to depend on the screen retaining it after it is ground up. As regards whalebone, another like source of annoyance, the same writer advises the employment of one or two extra hands expressly to rip up old corsets and similar articles usually containing whalebone. This is claimed to be a more economical method than to trust to the fidelity of the other sorters for throwing out the whalebone, or to sell this class of race cheaply, for the manufacture ters for throwing out the whalebone, or to soll this class of rags cheaply, for the manufacture of lower grades of paper.—Mechanical News.

## The Altitude at Which Men Can Live.

There has been a great deal of discussion as to the altitude at which human beings can exist, and Mr. Glaisher himself can tell us as much about it as anybody. In July, 1872, he and Mr. Coxwell ascended in a balloon to the us elevation of 37,000 feet. Previou to the start, Mr. Glaisher's pulse stood at 76 beats a minute, Coxwell's at 74. At 17,000 feet the pulse of the former was at 84, that of the latter 100. At 19,000 feet Glaisher's hands and feet were quite blue, but not his face. At 21,000 feet he heard his heart beating, and his breathing became oppressed; at 29,000 he became senseless; notwithstanding which the aeronaut, in the interest of science, went up another 8,000 feet, till he could no longer use his hands, and had to pull the string of the valve with his teeth. Aeronauts who have to make no exertions, have of course, a great advantage over members of the Alpine club, and those who trust their legs; even at 13,000 feet these

the we got most of the tax and territ which is required by the dovernment from manufactures. We pay in addition to the cost of transportation on all stricles which are brought from abroad, whether of lumy or comfort, the revenue which the theorement receives The capitalist who has his money invested in bonds or other securities, or is engaged in manufactures, compels the party who uses or consumes the same to pay all the tax which are consument as a state to pay all the tax which are consument as a state to pay all the hast dod is coasily or one-one the tariff may be. All he hast dod is to add the percentage necessary to cover this expense and collect it without diminishing his profits.

The removement has ralled into the hands of the consumers rather than the producers of the country, and per consequence a system of unjust discrimination has been adopted and carried out, which makes the producers never level fellow citizens.

This state of stafars has been brought about mainty by the fact that the producers, as a class, have had their time so occupied with the attention may be taken that active part in the administration and control of State and State and country which the proper has a summary that the same sufficient in surprise the part of the payment of the who trust their legs; even at 13,000 feet these climbers feel very uncomfortable, more so in the Alps, it seems, than elsewhere.

At the monastery of St. Bernard, 8,117 feet high, the monks become asthmatic, and are compelled frequently to descend into the Valley of the Rhone for—anything but "a breath of fresh air;" and at the end of ten years' service are obliged to give up their high living and come down to the usual level. At the same time in South America there are towns, such as Potosi, placed as high as the top of Mount Blanc, the inhabitants of which feel no inconvenience. The highest inhabited spot in the world is, however, the Buddhist cloister of Hanale in Thibet, where twenty-one priests live at an altitune of 16,000 feet. The brothers Schlagintweit, when they explored brothers Schlagintweit, when they explored the glaciers of the Ibi Gamin, encamped at 21,-000 feet, the highest altitude at which a European ever passed the night. Even at the top Mount Blanc, Prof. Tyndali's guides foun very unpleasant to do this, though the Professor himself did not confess to feeling so bad as they. The highest mountain in the world is Mount Everest (Himalaya), 29,000 feet, and the condor has been seen "winging the blue the condor has been seen "winging the blue air" 500 feet higher. The air by the by, is not "blue," or else, as De Saussure pointed out, "the distant mountains, which are coverout, the distant industrials and also;" its ap-parent color being due to the reflection of light. What light can do, and does, is marvelous; and not the least is its power of attraction

lowing we clip from the columns of one of our rural exchanges. The recipe certainly deserves a trial: Take one ounce of watermelon rind, dress it carefully and then put in ten pounds of pulverized sugar, five pounds of citron. in ten pounds of pulverized sugar, five pounds of citron, two pounds all-spice, one pound cloves, one bottle of flavoring extract, boil over a slow fire for twenty-four hours, then remove the watermelon, do it up carefully in a napkin and bury it. Let the balance cool, and it will be ready for use.



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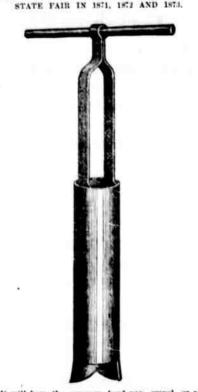
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